HARIMA S. No. 189.

Ship's Name: "Komaki-Maru"

General Arrangement.

No.

THE HARIMA SHIP BUILDING & ENGINEERING CO., LTD.,

神保

THE HARIMA SHIPBUILDING AND ENGINEERING Co., LTD.
DESIGN DEPARTMENT.
OCT 9 1933
KOBE, JAPAN.

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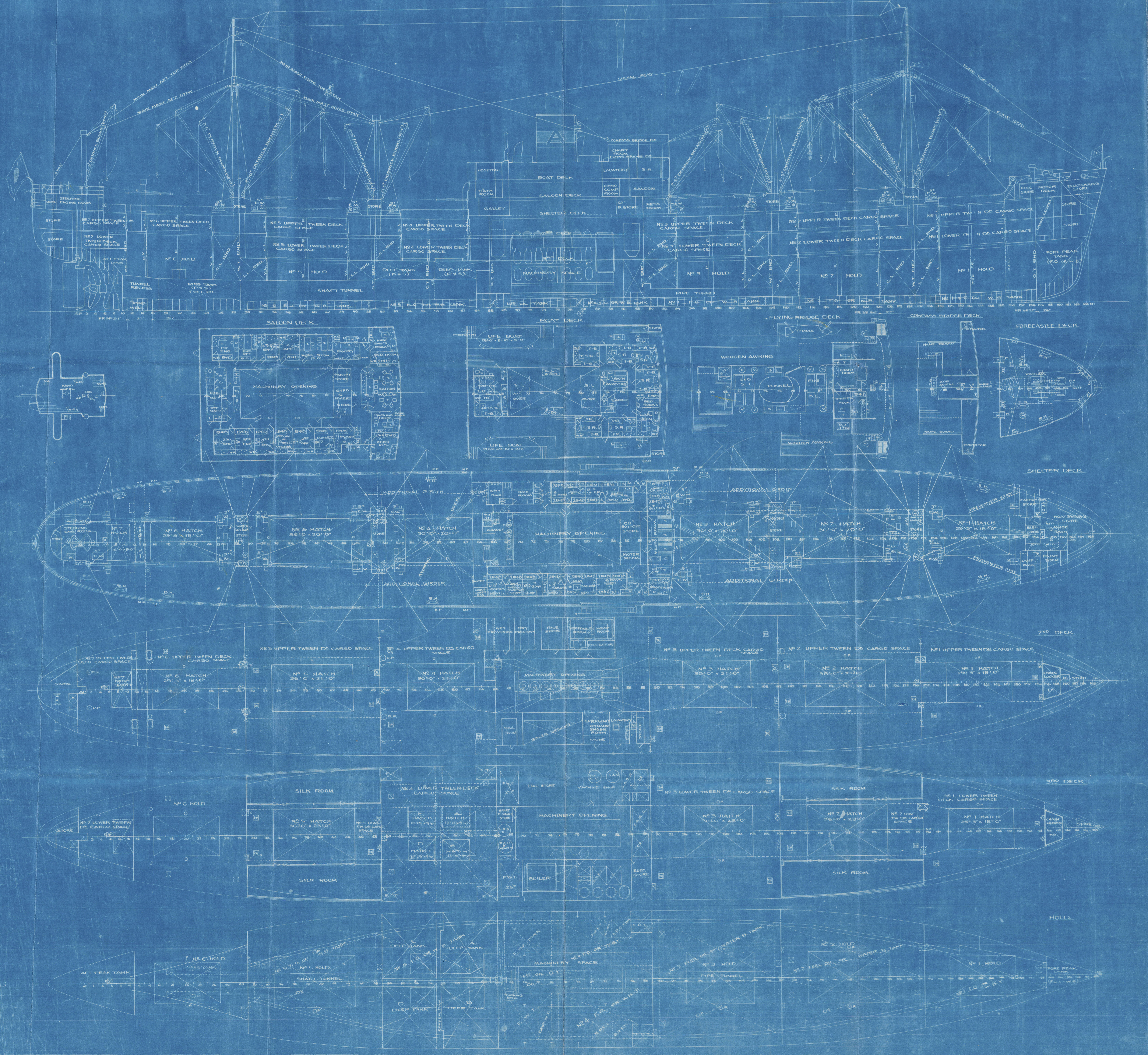

一般艤裝

Nº 189

尺度1/16吋ヲ以テ1呎トス

株式會社
播磨造船所造船部

部長	設計係			
	主任	擔當	製圖	寫圖

昭和　年　月　日

圖面番號

出圖番號

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HARIMA S. No. 189

Ship's Name : "Komaki-Maru"

Construction Profile & Deck Plan
Sheet 1.

No.

THE HARIMA SHIP BUILDING & ENGINEERING CO., LTD.,

Extra Copy.

THE HARIMA SHIPBUILDING AND ENGINEERING Co., LTD.
DESIGN DEPARTMENT.
OCT 9 1933
AIOI NEAR KOBE, JAPAN.

神保

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SNo 139
小牧丸
完成圖
鋼材配置
其二
尺度1/8吋ヲ以テ1呎トス
株式會社
昭和
圖面番號
出圖番號
DOCKING BRIDGE
SHELTER DECK
2ND DECK
3RD DECK
№ 6 HOLD
№ 5 HOLD
TUNNEL RECESS
WING TANK
SHAFT TUNNEL
№ 6 FUEL OIL OR WATER BALLAST TANK
№ 5 FUEL OIL OR WATER BALLAST TANK
№ 4 HOLD OR DEEP TANK
THRUST RECESS
MACHINERY SPACE
ENGINE GIRDER TOP
COMPASS BRIDGE
FLYING BRIDGE
BOAT DECK
SALOON DECK
CASING TOP
№ 4 FUEL OIL OR WATER BALLAST TANK
№ 3 HOLD
PIPE TUNNEL
№ 3 FUEL OIL OR WATER BALLAST TANK
№ 2 HOLD
№ 2 FUEL OIL OR WATER BALLAST TANK
№ 1 HOLD
№ 1 FUEL OIL OR WATER BALLAST TANK
F'CLE DK
CHAIN LOCKER
FRAME SPACE 24" APART
FRAMES IN PEAK 200 × 90 × 11.5 B.A.
FRAME SPACE 27" APART
FRAME SPACE 36" APART
TWEEN DECK FRAMES 200 × 90 × 12.5 BULB ANGLE
MAIN FRAMES 280 × 90 × 13 BULB ANGLE
FRAME ANGLE AT BILGE 90 × 90 × 13 SINGLE
UPPER TWEEN DECK FRAMES BULB MAY BE CUT OFF ALTERNATE FRAMES TO MAKE 150 × 90 × 12.5 ANGLE EXCEPT UNDER DECK HOUSE.
MAIN FRAMES 340 × 100 × 17 BULB ANGLE
MAIN FRAMES IN PEAK 200 × 90 × 11.5 B.A.
DOCKING BRIDGE
BOAT DECK
BEAMS 130 × 75 × 9 ANGLE
MACHINERY OPENING
SALOON DECK
BEAMS 150 × 75 × 9 BULB ANGLE
FLYING BRIDGE
BEAMS 130 × 75 × 9 ANGLE
COMPASS BRIDGE
BEAMS 100 × 75 × 8 ANGLE
F'CLE DECK
THROUGH BEAMS & HALF BEAMS 230 × 90 × 11 BULB ANGLE WITH BRACKET KNEES 27" × 20" × 40" 2½" FL. AT EDGE
SHELTER DECK PLAN
№ 6 CARGO HATCH 23'-3" × 18'-0"
№ 5 CARGO HATCH 36'-0" × 20'-0"
№ 4 CARGO HATCH 30'-0" × 20'-0"
MACHINERY OPENING
№ 3 CARGO HATCH 30'-0" × 20'-0"
№ 2 CARGO HATCH 36'-0" × 20'-0"
№ 1 CARGO HATCH 29'-3" × 18'-0"
STRINGER ANGLE 150 × 150 × 19
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HARIMA YARD No. 189

Ship's Name :

Midship Section.

No.

THE KOBE STEEL WORKS, LTD. KOBE, JAPAN.

"Komaki Maru"

~~728~~ 7

Latest plan

THE HARIMA SHIPBUILDING AND ENGINEERING Co., LTD.
DESIGN DEPARTMENT
MAY 22 1932
OHI, NEAR KOBE, JAPAN.

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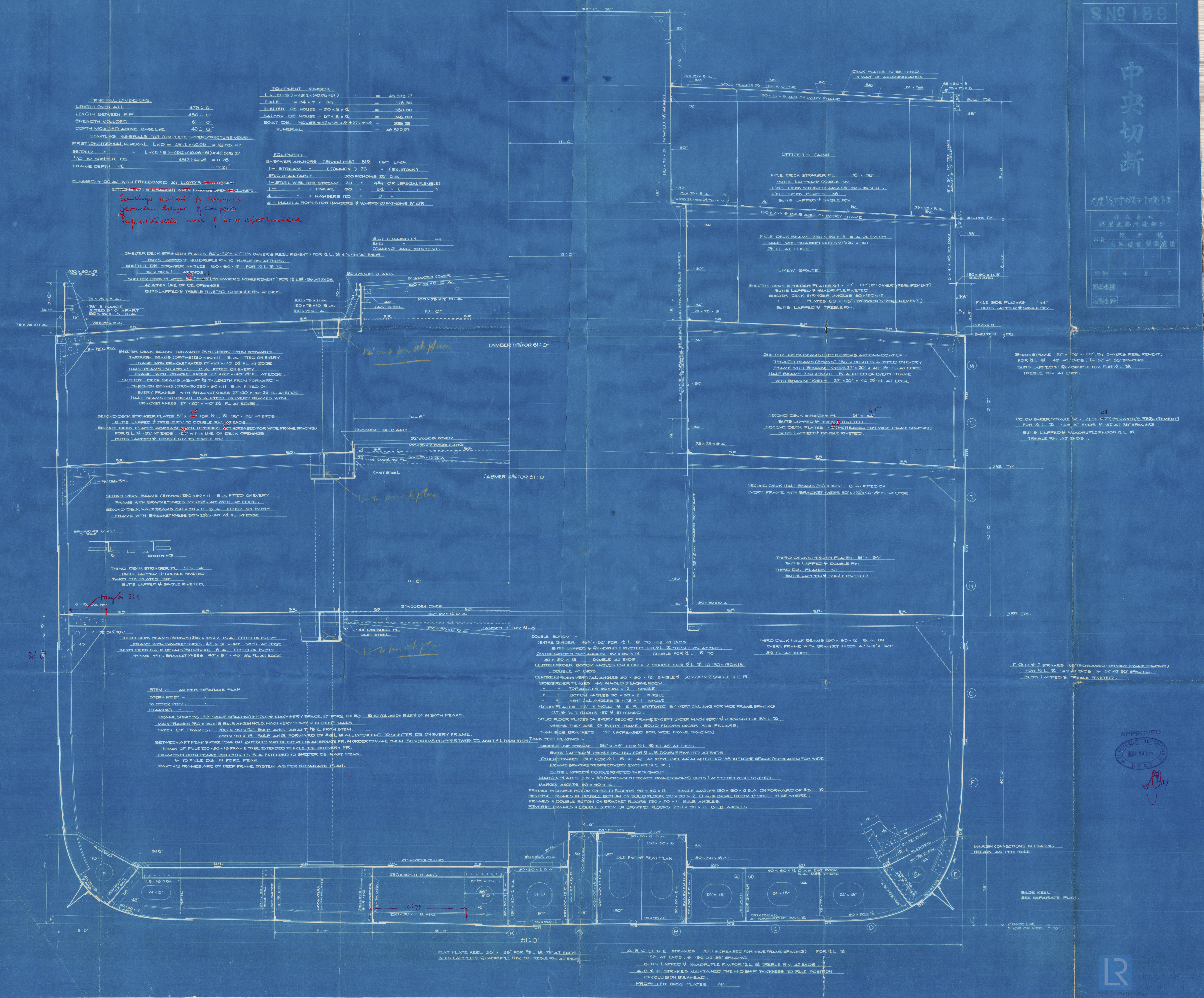
S No 189
中央切断
尺度1/2吋ヲ以テ1呎トス
株式會社 播磨造船所造船部
部長 設計係 主任 擔當 製圖 寫圖
昭和 年 月 日
圖面番號
出圖番號
PRINCIPAL DIMENSIONS.
LENGTH OVER ALL 478' - 0"
LENGTH BETWEEN P.P. 450' - 0"
BREADTH MOULDED 61' - 0"
DEPTH MOULDED ABOVE BASE LINE 40' - 0"
SCANTLING NUMERALS FOR COMPLETE SUPERSTRUCTURE VESSEL
FIRST LONGITUDINAL NUMERAL L×D = 451.2 × 40.06 = 18075.07
SECOND " " L×(D+B) = 451.2×(40.06+61) = 45.598.27
L/D TO SHELTER DK. 451.2 ÷ 40.06 = 11.26
FRAME DEPTH d = 17.21'
CLASSED + 100 A1 WITH FREEBOARD AT LLOYD'S A TO OBTAIN
EXTREME 27'-9" DRAUGHT WHEN TONNAGE OPENING CLOSED.
Scantlings suitable for maximum Geometric draught of Complete Superstructure vessel of 40.06 depth moulded
EQUIPMENT NUMBER.
L × (D+B) = 451.2 × (40.06+61) = 45.598.27
F'CLE = 34 × 7 × 3/4 = 178.50
SHELTER DK. HOUSE = 90 × 8 × ½ = 360.00
SALOON DK. HOUSE = 87 × 8 × ½ = 348.00
BOAT DK. HOUSE = 57 × 75 × ½ + 27 × 9 × ½ = 335.25
NUMERAL = 46.820.02
EQUIPMENT.
3 - BOWER ANCHORS (STOCKLESS) 81½ CWT EACH
1 - STREAM " (COMMON) 25 " (EX.STOCK)
STUD CHAIN CABLE 300 FATHOMS 2½" DIA.
1 - STEEL WIRE FOR STREAM 120 " 4¾" CIR. (SPECIAL FLEXIBLE)
1 - " " " TOWLINE 130 " 5½" " (")
4 - " " " HAWSERS 120 " 3" "
4 - MANILA ROPES FOR HAWSERS & WARPS 120 FATHOMS 8" CIR.
SIDE COAMING PL. ·44"
END " "
COAMING ANG 90 × 75 × 11
SHELTER DECK STRINGER PLATES 64" × ·70" + ·07" (BY OWNER'S REQUIREMENT) FOR ½ L. ⊠ 41" × ·44" AT ENDS.
BUTTS LAPPED & QUADRUPLE RIV. TO TREBLE RIV. AT ENDS.
SHELTER DK. STRINGER ANGLES 150 × 150 × 19 FOR ½ L. ⊠ TO 90 × 90 × 11 AT ENDS. ·06
SHELTER DECK PLATES ·55" + ·06 (BY OWNER'S REQUIREMENT) FOR ½ L ⊠ ·36" AT ENDS
·42" WITHIN LINE OF DK. OPENINGS.
BUTTS LAPPED & TREBLE RIVETED TO SINGLE RIV. AT ENDS.
SHELTER DECK BEAMS FORWARD 1/8 TH. LENGTH FROM FORWARD:-
THROUGH BEAMS (3 ROWS) 230 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 27" × 20" × ·40" 2½" FL. AT EDGE.
HALF BEAMS 230 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 27" × 20" × ·40" 2½" FL. AT EDGE.
SHELTER DECK BEAMS ABAFT 1/8 TH. LENGTH FROM FORWARD:-
THROUGH BEAMS (3 ROWS) 230 × 90 × 11 B.A. FITTED ON EVERY FRAMES WITH BRACKET KNEES 27" × 20" × ·40" 2½" FL. AT EDGE.
HALF BEAMS 230 × 90 × 11 B.A. FITTED ON EVERY FRAMES WITH BRACKET KNEES 27" × 20" × ·40" 2½" FL. AT EDGE.
SECOND DECK STRINGER PLATES 51" × ·45 FOR ½ L. ⊠ 38" × ·36" AT ENDS.
BUTTS LAPPED & TREBLE RIV. TO DOUBLE RIV. AT ENDS.
SECOND DECK PLATES ABREAST DECK OPENINGS ·43 (INCREASED FOR WIDE FRAME SPACING) FOR ½ L. ⊠ ·32" AT ENDS. ·35 WITHIN LINE OF DECK OPENINGS
BUTTS LAPPED & DOUBLE RIV. TO SINGLE RIV.
SECOND DECK BEAMS (3 ROWS) 250 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 30" × 22½" × ·40" 2½" FL. AT EDGE.
SECOND DECK HALF BEAMS 250 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 30" × 22½" × ·40" 2½" FL. AT EDGE.
SPARRING 6" × 2" O. PINE
THIRD DECK STRINGER PL. 51" × ·34"
BUTTS LAPPED & DOUBLE RIVETED.
THIRD DK. PLATES ·30"
BUTTS LAPPED & SINGLE RIVETED.
May be 22½"
6 - 7/8" DIA. RIV.
7 - 7/8" DIA. RIV.
THIRD DECK BEAMS (3 ROWS) 250 × 90 × 12 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 47" × 31" × ·40" 3½" FL. AT EDGE
THIRD DECK HALF BEAMS 250 × 90 × 12 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 47" × 31" × ·40" 3½" FL. AT EDGE.
30" Ⓑ
STEM :- AS PER SEPARATE PLAN
STERN POST :- "
RUDDER POST :- "
FRAMING :-
FRAME SPACE 36" (33" RULE SPACING) IN HOLD & MACHINERY SPACE, 27" FORD. OF 3/5 L. ⊠ TO COLLISION BHD. & 24" IN BOTH PEAKS.
MAIN FRAMES 280 × 90 × 13 BULB ANG. IN HOLD, MACHINERY SPACE & IN DEEP TANKS
TWEEN DK. FRAMES :- 200 × 90 × 12.5 BULB ANG. ABAFT 1/5 L. FROM STEM.
200 × 90 × 13 BULB ANG. FORWARD OF 3/5 L. ⊠ ALL EXTENDING TO SHELTER DK. ON EVERY FRAME.
BETWEEN AFT PEAK & FORE PEAK B.H. BUT BULB MAY BE CUT OFF ON ALTERNATE FR. IN ORDER TO MAKE THEM 150 × 90 × 12.5 IN UPPER TWEEN DK. ABAFT 1/5 L. FROM STEM.
IN WAY OF F'CLE 200 × 90 × 13 FRAME TO BE EXTENDED TO F'CLE DK. ON EVERY FR.
FRAMES IN BOTH PEAKS 200 × 90 × 11.5 B.A. EXTENDED TO SHELTER DK. IN AFT PEAK & TO F'CLE DK. IN FORE PEAK.
PANTING FRAMES ARE OF DEEP FRAME SYSTEM AS PER SEPARATE PLAN.
12' out per dk plan
13'-6 per dk plan
CAMBER 14¾ FOR 61' - 0"
CABMER 14¾ FOR 61' - 0"
CAMBER 3" FOR 61' - 0"
3" WOODEN COVER
100 × 75 × 12 D.A.
·44" CAST STEEL
2½" WOODEN COVER
100 × 75 × 12 DOUBLE ANG.
·44" DOUBLING PL.
CAST STEEL
130 × 90 × 12 D.A.
TOP PL. ·30"
SPACED 36" APART
110 × 75 × 9 A. SPACED 36" APART AND STRONGER BULB ANGLES WHERE NECESSARY
WOOD PLANKS 2½" THICK. O. PINE
130 × 75 × 9 ANG ON EVERY FRAME
DECK PLATES TO BE FITTED IN WAY OF ACCOMMODATION
BOAT DK.
OFFICER'S CABIN
F'CLE DECK STRINGER PL. 36" × ·38".
BUTTS LAPPED & DOUBLE RIV.
F'CLE DECK STRINGER ANGLES 90 × 90 × 10.
F'CLE DECK PLATES ·36"
BUTTS LAPPED & SINGLE RIV.
150 × 75 × 9 BULB ANG. ON EVERY FRAME
SALOON DK.
F'CLE DECK BEAMS 230 × 90 × 13 B.A. ON EVERY FRAME WITH BRACKET KNEES 27" × 20" × ·40", 2½" FL. AT EDGE.
CREW SPACE
SHELTER DECK STRINGER PLATES 64" × ·70" + ·07" (BY OWNER'S REQUIREMENT)
BUTTS LAPPED & QUADRUPLE RIVETED.
SHELTER DECK STRINGER ANGLES 150 × 150 × 19
" " PLATES ·63" + ·05" (BY OWNER'S REQUIREMENT)
BUTTS LAPPED & TREBLE RIV.
F'CLE SIDE PLATING ·44"
BUTTS LAPPED & SINGLE RIV.
SHELTER DK.
SHELTER DECK BEAMS UNDER CREW'S ACCOMMODATION :-
THROUGH BEAMS (3 ROWS) 230 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 27" × 20" × ·40" 2½" FL. AT EDGE.
HALF BEAMS 230 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 27" × 20" × ·40" 2½" FL. AT EDGE.
SECOND DECK STRINGER PL. 51" × ·45
BUTTS LAPPED & TREBLE RIVETED.
SECOND DECK PLATES ·43 (INCREASED FOR WIDE FRAME SPACING)
BUTTS LAPPED & DOUBLE RIVETED.
2ND. DK.
SECOND DECK HALF BEAMS 250 × 90 × 11 B.A. FITTED ON EVERY FRAME WITH BRACKET KNEES 30" × 22½" × ·40" 2½" FL. AT EDGE.
THIRD DECK STRINGER PLATES 51" × ·34"
BUTTS LAPPED & DOUBLE RIV.
THIRD DK. PLATES ·30"
BUTTS LAPPED & SINGLE RIVETED.
3RD. DK.
THIRD DECK HALF BEAMS 250 × 90 × 12 B.A. ON EVERY FRAME WITH BRACKET KNEES 47" × 31" × ·40" 3½" FL. AT EDGE.
SHEER STRAKE 52" × ·76" + ·07" (BY OWNER'S REQUIREMENT) FOR ½ L. ⊠ ·49" AT ENDS, & ·52" AT 36" SPACING.
BUTTS LAPPED & QUADRUPLE RIV. FOR ½ L. ⊠ TREBLE RIV. AT ENDS.
BELOW SHEER STRAKE 52" × ·71" + ·03" (BY OWNER'S REQUIREMENT) FOR ½ L. ⊠ ·49" AT ENDS & ·52" AT 36" SPACING.
BUTTS LAPPED & QUADRUPLE RIV. FOR ½ L. ⊠ TREBLE RIV. AT ENDS.
F. G. H. & J STRAKES ·68" (INCREASED FOR WIDE FRAME SPACING) FOR ½ L. ⊠ ·49" AT ENDS, & ·52" AT 36" SPACING.
BUTTS LAPPED & TREBLE RIVETED.
DOUBLE BOTTOM :-
CENTRE GIRDER 46¼" × ·62" FOR ½ L. ⊠ TO ·48" AT ENDS.
BUTTS LAPPED & QUADRUPLE RIVETED FOR ½ L. ⊠ TREBLE RIV. AT ENDS.
CENTRE GIRDER TOP ANGLES 90 × 90 × 14 DOUBLE FOR ½ L. ⊠ TO 90 × 90 × 13 DOUBLE AT ENDS.
CENTRE GIRDER BOTTOM ANGLES 130 × 130 × 17 DOUBLE FOR ½ L. ⊠ TO 130 × 130 × 15 DOUBLE AT ENDS.
CENTRE GIRDER VERTICAL ANGLES 90 × 90 × 12 SINGLE & 130 × 130 × 12 SINGLE IN E.R.
SIDE GIRDER PLATES ·44" IN HOLD & ENGINE ROOM.
" " TOP ANGLES 90 × 90 × 12 SINGLE
" " BOTTOM ANGLES 90 × 90 × 12 SINGLE
" " VERTICAL ANGLES 75 × 75 × 11 SINGLE
FLOOR PLATES ·44" IN HOLD & E.R. STIFFENED BY VERTICAL ANG. FOR WIDE FRAME SPACING
O.T. & W.T. FLOORS ·52" & STIFFENED.
SOLID FLOOR PLATES ON EVERY SECOND FRAME EXCEPT UNDER MACHINERY & FORWARD OF 3/5 L. ⊠ WHERE THEY ARE ON EVERY FRAME. SOLID FLOORS UNDER W.S. PILLARS.
TANK SIDE BRACKETS ·52" (INCREASED FOR WIDE FRAME SPACING).
TANK TOP PLATING :-
MIDDLE LINE STRAKE ·56" × ·56" FOR ½ L. ⊠ TO ·46" AT ENDS.
BUTTS LAPPED & TREBLE RIVETED FOR ½ L. ⊠ DOUBLE RIVETED AT ENDS.
OTHER STRAKES ·50" FOR ½ L. ⊠ TO ·42" AT FORE END, ·44" AT AFTER END, ·56" IN ENGINE SPACE (INCREASED FOR WIDE FRAME SPACING RESPECTIVELY EXCEPT IN E.R.)
BUTTS LAPPED & DOUBLE RIVETED THROUGHOUT.
MARGIN PLATES 39" × ·58" (INCREASED FOR WIDE FRAME SPACING) BUTTS LAPPED & TREBLE RIVETED.
MARGIN ANGLES 90 × 90 × 14.
FRAMES IN DOUBLE BOTTOM ON SOLID FLOORS 90 × 90 × 12 SINGLE ANGLES 130 × 130 × 12 S.A. ON FORWARD OF 3/5 L. ⊠
REVERSE FRAMES IN DOUBLE BOTTOM ON SOLID FLOOR 90 × 90 × 12 D.A. IN ENGINE ROOM & SINGLE ELSE WHERE.
FRAMES IN DOUBLE BOTTOM ON BRACKET FLOORS 230 × 90 × 11 BULB ANGLES.
REVERSE FRAMES IN DOUBLE BOTTOM ON BRACKET FLOORS 230 × 90 × 11 BULB ANGLES.
SEE ENGINE SEAT PLAN.
2½" WOODEN CEILING
6'-7½"
61'-0"
MARGIN CONNECTIONS IN PANTING REGION AS PER RULE.
BILGE KEEL :- SEE SEPARATE PLAN.
BASE LINE & TOP OF KEEL ·70"
FLAT PLATE KEEL 55" × ·85" FOR 3/5 L. ⊠ ·75" AT ENDS.
BUTTS LAPPED & QUADRUPLE RIV. TO TREBLE RIV. AT ENDS.
A.B.C.D. & E STRAKES ·70" (INCREASED FOR WIDE FRAME SPACING) FOR ½ L. ⊠ ·52" AT ENDS, & ·56" AT 36" SPACING.
BUTTS LAPPED & QUADRUPLE RIV. FOR ½ L. ⊠ TREBLE RIV. AT ENDS.
A. B. & C. STRAKES MAINTAINED THE MID SHIP THICKNESS TO RULE POSITION OF COLLISION BULKHEAD.
PROPELLER BOSS PLATES ·74"
APPROVED
LLOYD'S REGISTER OF SHIPPING MAY 30 1932 KOBE
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HARIMA S. No. 189.

Ship's Name : "Komaki-Maru"

Displacement Curves.

No.

THE HARIMA SHIP BUILDING & ENGINEERING CO., LTD.,

THE HARIMA SHIPBUILDING AND ENGINEERING Co., LTD.
DESIGN DEPARTMENT.
OCT 13 1933
OH NEAR KOBE, JAPAN.

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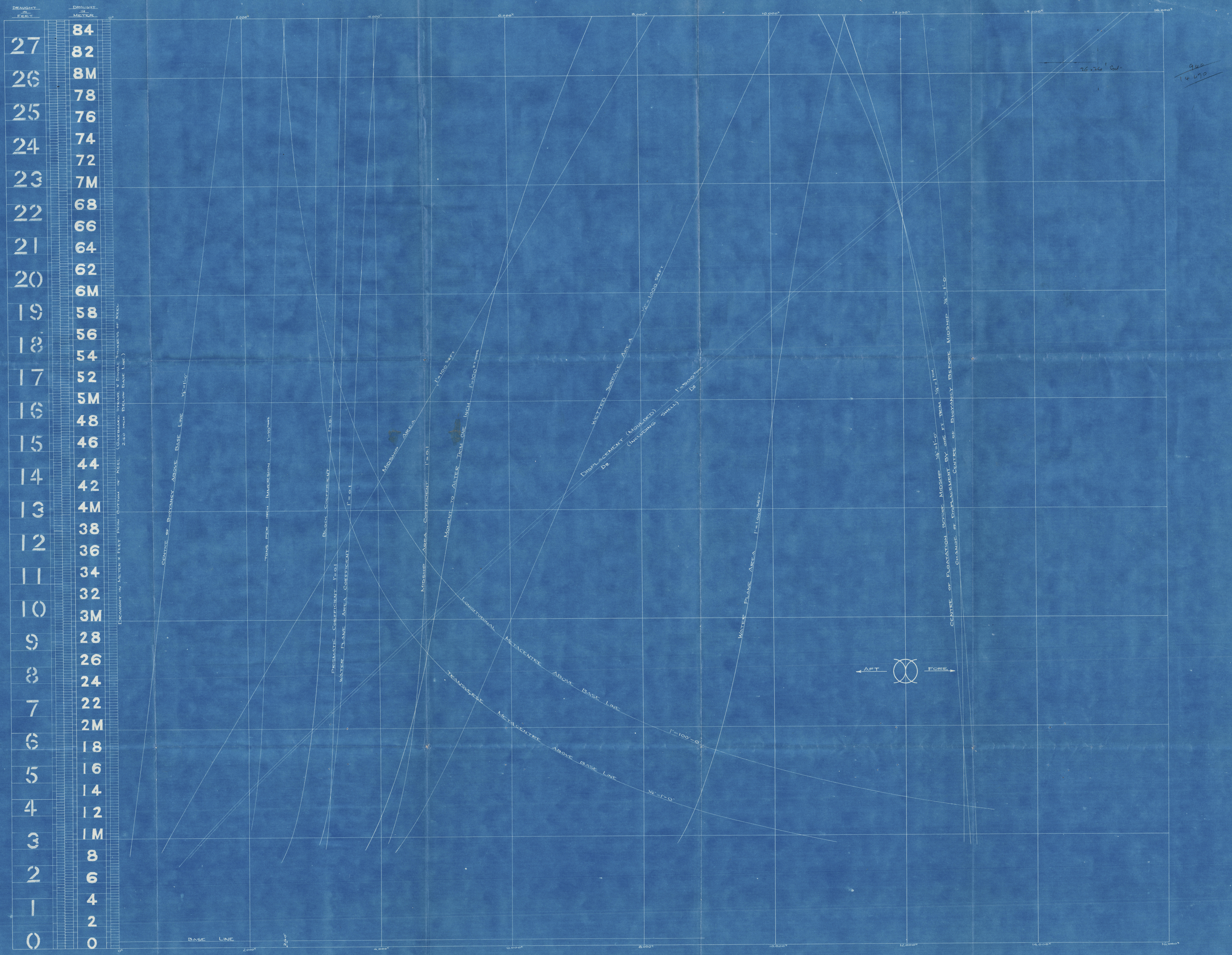

No 189

排水量曲線

株式會社
播磨造船所造船部

部長	設計係			
	主任	擔當	製圖	寫圖

昭和 年 月 日

圖面番號 53

出圖番號

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